

From University at Buffalo Startup to Worldwide, Publicly Traded Pharmaceutical Company





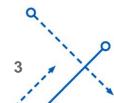
PRESENTERS

Norma Nowak, Executive Director, New York State Center of Excellence in Bioinformatics & Life Sciences

Jeff Dunbar, Director, Technology Transfer, Business & Entrepreneur Partnerships, University at Buffalo

Agenda

- Short Story To provide context for the Audience
- Long Story
 - UB Technology
 - Origins of Kinex Pharmaceuticals
 - UB Support
 - Transformation to global company: Athenex
- Lessons Learned





(fka Kinex)

Summary

1998-2001 Tech disclosure/patents filed

2004 License executed

2006 1st UB US issued patent

UB: Labs, Clean Room, UB CAT \$

Raised \$200 million (US, Asia)

Acquired new technology platforms

2016 NYS \$225 million Dunkirk plant

2017 \$66 million NASDAQ IPO

2019 \$100 million private placement

Employs 546 people worldwide



Platform Programs

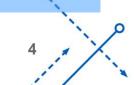
Src Kinase Inhibition – Phase III

Orascovery

- Oraxol Phase III
- · Oratecan Phase I
- Oradoxel Phase I
- Oratopo Phase I

TCR-T Immunotherapy

Others





LONG STORY

UB Technology

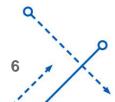
Protein Kinase and Phosphatase Inhibitors and Methods for Designing Them

- US 7,070,936 and 7,005,445
- Method for identifying an inhibitor Mimetica™
- Non-ATP competitive compounds safer
- Limited library and breadth of composition of matter
- Good safety profile but not potent enough



- To raise money
- To develop a novel compounds







Upstate Alliance for Innovation – Launched in 2000



Beaver Hollow Conference Center UAI Retreat, May 2003

\$600,000 NSF Partnership for Innovation Award

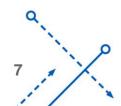
Goal: Foster and innovation ecosystem

Partners:

- University at Buffalo
- RIT
- University of Rochester
- Mayors offices of Buffalo and Rochester
- High Tech Rochester
- Insyte Consulting (fka WNY TDC)

Innovators Nominated (select group)

- Dr. David Hangauer among them
- Catalyzed formation of Kinex Pharmaceuticals



UB SUPPORT

CENTER FOR ADVANCED
TECHNOLOGY IN BIG DATA
AND HEALTH SCIENCES

The Athenex Story



Athenex

Entrepreneurial spirit and UB support drives global growth.



FOUNDED: 2003 | Buffalo, NY

INDUSTRY / BUSINESS

Pharmaceuticals

ABOUT THE COMPANY

Athenex is a global biopharmaceutical company dedicated to the discovery, development and commercialization of novel therapies for the treatment of cancer.

WNY EMPLOYEES

132 employees

www.athenex.com

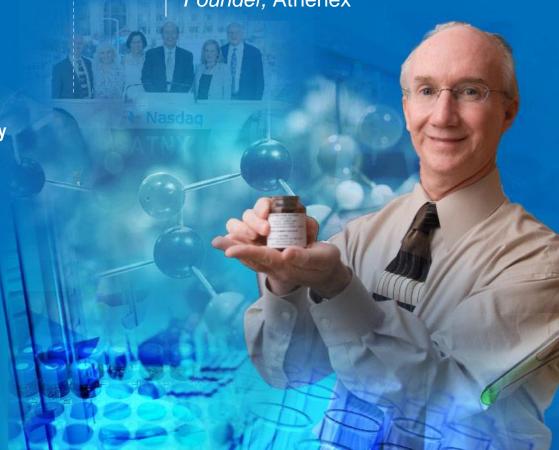


Research and Economic Development



David G. Hangauer, PhD, Founder, Athenex

and motivated."



Athenex

Athenex

How UB built a winning partnership

THE BUFFALO NEWS

Athenex raises \$100 million in private stock sale



May 06, 2019 08:00 ET | Source: Athenex. Inc.

BUFFALO, N.Y., May 06, 2019 (GLOBE NEWSWIRE) — Athenex, Inc. (Nasdaq Augreement for the sale of its common stock in a private placement with three institution deducting offering expenses. Net proceeds from the transaction are expected to be used activities, including pre-launch activities for Oraxot, manufacturing infrastructure; and working.

The Company will issue 10 million shares of common stock for a purchase price of \$10.00 per shares

"We are extremely delighted by the support from these leading healthcare investment firms," said Dr. Jointment and support our pre-launch and commercialization efforts."

The offering of shares of common stock has not been registered under the Securities Act of 1933, as amended (the "Securities Act"), or applicable state securities laws. At the closing of the offering, the Company will enter into a registration rights agreement with the investors placement.

This press release shall not constitute an offer to sell or a solicitation of an offer to buy these securities, nor shall there be any offer or sale such state or other jurisdiction.

About Athenex, Inc.

Founded in 2003, Athenex, Inc. is a global clinical stage biopharmaceutical company dedicated to becoming a leader in the discovery, devel Commercial Platform and a Global Supply Chain Platform. The Company's current clinical pipeline is derived from four different platform tec therapy. Athenex's employees worldwide are dedicated to improving the lives of cancer patients by creating more active and tolerable treath in Chengoing, China. For more information, please visit <u>www.athenex.com</u>

Forward-Looking Statements

Except for historical information, all of the statements, expectations, and assumptions contained in this press release are forward-looking sti likely, "may," plan," "potential," "perdict," "perliminary," "probable," "project," "promising," "seek," "should," "will," "would," and similar express include: the development stage of our primary clinical candidates and related risks involved in drug development, "inclinical trials, regulated, read to continue as a going concern, competition, intellectual property risks, risks relating to doing business in Chinia, and the other risk fa c=254495&c:incline or upon request from our Investor Pelations Department, All information provided in this release is as of the data.



Startup Began at UB Lab



Multiple
Disclosures
to Tech
Transfer



UB Licensed Technology to Kinex



Started Company at Center for Bioinformatics and Life Sciences Facility (CBLS)



UB Center for Advanced Technology Award Recipient



Went Public IPO June 2017



Raised \$100M in Private Stock Sale



MAY

2019

Expands Clinical Operations June 2019

June 28, 2019

JUNE 2019

Athenex Announces Strategic Global Initiatives to Expand Clinical Operations

BUFFALO, N.Y., June 28, 2019 (GLOBE NEWSWIRE) – Athenex, Inc. (Nasdaq: ATNX), a global biopharmaceutical company dedicated to the discovery, development and commercialization of novel therapies for the treatment of cancer, today announced that the Company has strategically expanded its presence in Europe and Latin America to grow its global clinical research and development capacity. The Company believes these initiatives have the potential to enhance Athenex's capacity to conduct global clinical studies and support its regional marketing decision process. They are part of the Company's strategy to build on its current strong presence in U.S. and Asia, and help maximize the global potential of its pipeline.

Athenex's oncology-focused pipeline currently has nine clinical candidates, including two drug candidates in Phase III development. In line with the Company's goal to expand its capability and bandwidth to optimize global development and commercialization of its pipeline products, Athenex has been evaluating operational opportunities in Europe and Latin America.

Everyday victories add up to a winning partnership

Center for Advanced Technology in Big Data and Health Sciences (UB CAT)

Projects and partnerships







2007-08 Clinical Trials SRC Inhibitor (Brain Cancer)



2008-09 Pre-Clinical Testing JAK3 Inhibitor (Inflammatory/ Autoimmune Disease)



2008-09 Pre-Clinical Testing Kinase Inhibitor (Brain Cancer)



2009-10 Pre-Clinical Development of KXS2-361 (Glioblastoma)



2010-11 Toxicity Studies of KXS2-361 (Glioblastoma)



2011-12 Development of KX01 Combination Therapy (Oncology)



2012-13 Development of Novel Small Molecule



2014-15 Manufacturing of KX2-361 Capsules



2015-16
Development
& Manufacture
of Proprietary
Drug

UB CAT Projects

Center of Excellence in Bioinformatics and Life Sciences





TRANSFORMATION

Transformation to global company: Athenex

First Key Out-Licensing Event KX01 Licensed to Hanmi Pharmaceuticals



Picture from licensing ceremony, Seoul, South Korea

April, 2011



Athenex Expands Footprint In New York State & North America: Government Support, Acquisitions & Expansions





QuaDPharma, LLC Buffalo, NY Acquired 2014



Conventus Building from NYS-2015
Athenex Headquarters
Buffalo Niagara Medical Campus



66,000 sq ft – laboratory/office 320,000 sq ft factory



From NYS
Dunkirk, NY
Under construction-2019

Also Offices in: Cranford, New Jersey; Clinical Affairs Chicago, Illinois; Athenex Specialty Products Houston, Texas; Polymed Sales



Athenex Expands Footprint Into Asia: Government Support & Acquisitions



Athenex Hong Kong Subsidiaries:
Kinex Pharmaceuticals HK Limited-2013
& Comprehensive Drug Enterprises acquisition-2015,
(Picture 2015)



Polymed/Taihao acquisition-2015 Chongging, China



500,000 sq ft - API/factory/office



Banan District in Chongqing, China-2015
Constructing two pharmaceutical
manufacturing plants

Also Office in Taipei, Taiwan; Asia Clinical Affairs





ATHENEX TODAY

Athenex/Kinex Becomes a Flagship Spinout Company from the University at Buffalo---Shows It Can Be Done!







Venture Capitalists call startup companies that reach a valuation of \$1 billion or more "Unicorns"

Athenex currently has a valuation of at least \$1 billion on Nasdaq.

A Buffalo "Unicorn" has been born from a UB Professor's lab.



ATHENEX'S FOCUS...

Athenex is a publicly-traded (NASDAQ symbol **ATNX**), growing, global pharmaceutical company that develops and delivers products in four disciplines:

503B

 Producing <u>compounded</u> sterile preparations in accordance with FDA's 503B cGMP requirements to ensure product quality (FDA Title 21 CFR parts 210 and 211)

SPECIALTY

Providing FDA-approved, finished-dose specialty **generic injectable products.**

API

 Manufacturing <u>Active Pharmaceutical Ingredients</u> for creating high quality pharmaceutical products and reducing the volatility in the supply chain.

NOVEL ONCOLYTICS Improving the lives of cancer patients through innovative <u>oncology medications</u> and methods of action.



Athenex's Global Operations

Regional HeadquartersManufacturing FacilitiesResearch / Clinical Development

Amherst, NY Packaging Facilities Manchester, UK @ Buffalo, NY (North America HQ) Clinical Development Clarence, NY Research and Formulation cGMP Manufacturing Facilities Clinical Development Chongging, China Clinical Supply Regulatory Affairs cGMP API Manufacturing Facilities Global Partnering Research and Development Corporate Functions Regulatory Affairs cGMP Finish/Fill Facilities (Under Construction) Dunkirk, NY cGMP Finish/Fill Facilities (Under Construction) thenex Taipei, Taiwan 🥝 Clinical Development · Clinical Data Management · Regulatory Affairs Cranford, NJ @ Clinical Development Chicago, IL Regulatory Affairs Commercialization and US sales Global Partnering



· Global API Sales & Marketing



Hong Kong (Asia HQ)
 Research and Formulation

Global Partnering

Corporate Functions



Athenex Impact

- \$868 million market capitalization
 - has exceeded \$1 billion (Unicorn status)
- 546 employees worldwide
- 175 employees in Western New York
- 30 UB graduates employed









LESSONS LEARNED



Industry Experience

Question:

For faculty who don't have industry experience, would you advise them to seek out industry research collaborations, advisory positions, etc., to develop their business acumen before launching a startup?

Answer:

"Yes, experience is the best teacher. This is something best to learn by doing it. Many/most faculty are uninformed about how to share equity for success, how VCs really operate, how to raise capital, and how to build a successful company from the ground up."

- Dave Hangauer



Connections to Successful People

Buffalo alum and venture capitalist:

Key Finding: A critical success indicator in successful ventures is the relative success of the people connected to the entrepreneur.

Dave Hangauer - CSO

- Merck
- ARPIDA (IPO)
- Hypnion (acquired by Eli Lilly for \$315M)
- Industry Consultant
- University at Buffalo
- Upstate Alliance for Innovation
- School of Pharmacy Development Committee

Lyn Dyster - COO

- CEO, Gencyte
- Other startups
- Upstate Alliance for Innovation

Allen Barnett - CEO

- UB Alum
- Schering Plough retired
- School of Pharmacy
 - DevelopmentCommittee

Johnson Lau – Chair, BOD

- Schering Plough
 - ICN
- Ribopharm (ICN spinout)





The way forward for upstate businesses

Rochester Beacon - by Jennifer Sertl and Nasir Ali - July 24, 2019

Shared success 'themes' based on interviews with founders of 12 startups.

Athenex	Synacor	Kionix
Vicarious Visions	ACV Auctions	Rheonix
Velan Ventures	SpinCar	Ephesus
CVC	Clerio Vision	iCardiac



Distant Customers

 Customers spread across the world or concentrated in distant places

Global vs Local

 Founders deeply rooted in local community but global view

Focus on Excellence

- Be better than competitors
- Relentless learning velocity
- Made location a non-issue for employees



Athenex Inc./Kinex Pharmaceuticals:

Formation and Development Timeline from University at Buffalo (UB)

It takes time... be persistent!

2002

Hangauer & Dyster

Meet at NSF

Innovation event

Decide to start Kinex

2000

Hangauer files **UB** patents on "Mimetica"

2004 Kinex raises \$1 M from Buffalo

"angel investors"

Triggers UB license

2002/3

Barnett CEO

Lau Chair BOD



From decision to spin out company to IPO was 15 years and a lot of hard work!



THANK YOU